

Amendments to Claims

- 1.) (Cancelled)
- 2.) (Cancelled)
- 3.) (Cancelled)
- 4.) (Cancelled)
- 5.) (Cancelled)
- 6.) (Cancelled)
- 7.) (Cancelled)
- 8.) (Cancelled)

9.) (Currently Amended) A lubricant composition for use in compression refrigeration and air conditioning, comprising:

(a) at least one lubricant selected from the group consisting of paraffins, naphthenes, aromatics and poly- α -olefins;

(b) at least one compatibilizer selected from the group consisting of:
amides represented by the formulae $R^1CONR^2R^3$ and wherein R^1, R^2, R^3 and R^5 are independently selected from aliphatic and alicyclic hydrocarbon radicals having from 1 to 12 carbon atoms; R^4 is selected from aliphatic hydrocarbylene radicals having from 3 to 12 carbon atoms; and wherein said amides have a molecular weight of from about 120 to about 300 atomic mass units and a carbon to oxygen ratio of from about 7 to about 20, wherein the weight ratio of said lubricant to said compatibilizer is from about 99:1 to about 1:1; and The composition of claims 1, 2 or 3, or the process of claim 4, or the method of claim 5 or 6, wherein cyclo- $[(CR^6R^7)_nCON(R^5)-]$, wherein n is selected from integers from 3 to 5, R^6 and R^7 are hydrogen or contain a single saturated hydrocarbon radical among the n methylene units, and R^5 is selected from saturated hydrocarbon radicals containing from 1 to 12 carbon atoms, and where said amides have a molecular weight of from about 160 to about 250 atomic mass units and a carbon to oxygen ratio of from about 7 to about 16.

10.) (Cancelled)

11.) (Cancelled)

12.) (New) A refrigerant composition for use in compression refrigeration and air conditioning, comprising :

- (a) at least one halogenated hydrocarbon selected from the group consisting of hydrofluorocarbons and hydrofluorochlorocarbons;
- (b) at least one lubricant selected from the group consisting of paraffins, naphthenes, aromatics and poly- α -olefins; and
- (c) at least one compatibilizer selected from amides represented by the formula cyclo- $[(CR^6R^7)_nCON(R^5)-]$, wherein n is selected from integers from 3 to 5, R^6 and R^7 are hydrogen or contain a single saturated hydrocarbon radical among the n methylene units, and R^5 is selected from saturated hydrocarbon radicals containing from 1 to 12 carbon atoms, and where said amides have a molecular weight of from about 160 to about 250 atomic mass units and a carbon to oxygen ratio of from about 7 to about 16.

13. (New) A refrigerant composition for use in compression refrigeration and air conditioning apparatus containing paraffinic, naphthenic, aromatic and/or poly- α -olefinic lubricant, said refrigerant composition comprising:

- (a) at least one halogenated hydrocarbon selected from the group consisting of hydrofluorocarbons and hydrochlorofluorocarbons; and
- (b) at least one compatibilizer selected from amides represented by the formula cyclo- $[(CR^6R^7)_nCON(R^5)-]$, wherein n is selected from integers from 3 to 5, R^6 and R^7 are hydrogen or contain a single saturated hydrocarbon radical among the n methylene units, and R^5 is selected from saturated hydrocarbon radicals containing from 1 to 12 carbon atoms, and where said amides have a molecular weight of from about 160 to about 250 atomic mass units and a carbon to oxygen ratio of from about 7 to about 16.

14. (New) A process for returning lubricant from a non-compressor zone to a compressor zone in a compression refrigeration system comprising:

- (a) contacting a lubricant selected from the group consisting of paraffins, naphthenes, aromatics, and polyalphaolefins, in said non-compressor zone with a halogenated hydrocarbon selected from the group consisting of hydrofluorocarbons and hydrochlorofluorocarbons, in the presence of a compatibilizer to form a solution comprising said lubricant, said halogenated hydrocarbon, and said compatibilizer; and
- (b) transferring said solution from said non-compressor zone to said compressor zone of said refrigeration system; wherein said compatibilizer is selected amides represented by the formula cyclo- $[(CR^6R^7)_nCON(R^5)-]$, wherein n is selected from integers from 3 to 5, R^6 and R^7 are hydrogen or contain a single saturated

hydrocarbon radical among the n methylene units, and R^5 is selected from saturated hydrocarbon radicals containing from 1 to 12 carbon atoms, and where said amides have a molecular weight of from about 160 to about 250 atomic mass units and a carbon to oxygen ratio of from about 7 to about 16.

15. (New) A method of solubilizing a halogenated hydrocarbon refrigerant, said halogenated hydrocarbon refrigerant selected from the group consisting of hydrofluorocarbons and hydrochlorofluorocarbons, in a lubricant said lubricant selected from the group consisting of paraffins, naphthenes, aromatics, and polyalphaolefins, which comprises the steps of contacting said lubricant with said halogenated hydrocarbon refrigerant in the presence of an effective amount of a compatibilizer and forming a solution of said lubricant and said halogenated hydrocarbon refrigerant,

wherein said compatibilizer is selected from the group consisting of: amides represented by the formula $\text{cyclo-}[(\text{CR}^6\text{R}^7)_n\text{CON}(\text{R}^5)-]$, wherein n is selected from integers from 3 to 5, R^6 and R^7 are hydrogen or contain a single saturated hydrocarbon radical among the n methylene units, and R^5 is selected from saturated hydrocarbon radicals containing from 1 to 12 carbon atoms, and where said amides have a molecular weight of from about 160 to about 250 atomic mass units and a carbon to oxygen ratio of from about 7 to about 16.

16. (New) A method of lubricating a compressor in a compression refrigeration apparatus containing a halogenated hydrocarbon refrigerant selected from the group consisting of hydrofluorocarbons and hydrochlorofluorocarbons, comprising the step of adding to said compressor a composition comprising:

(a) at least one lubricant selected from the group consisting of paraffins, naphthenes, aromatics, and polyalphaolefins; and

(b) at least one compatibilizer selected from the group consisting of: amides represented by the formula $\text{cyclo-}[(\text{CR}^6\text{R}^7)_n\text{CON}(\text{R}^5)-]$, wherein n is selected from integers from 3 to 5, R^6 and R^7 are hydrogen or contain a single saturated hydrocarbon radical among the n methylene units, and R^5 is selected from saturated hydrocarbon radicals containing from 1 to 12 carbon atoms, and where said amides

have a molecular weight of from about 160 to about 250 atomic mass units and a carbon to oxygen ratio of from about 7 to about 16.

Respectfully submitted,



CHYRREA J. SEBREE
ATTORNEY FOR APPLICANTS
REGISTRATION NO. 45,348
TELEPHONE: (302) 992-3407
FACSIMILE: (302) 892-7925

Date: February 17, 2004